

=> fil hcaplus  
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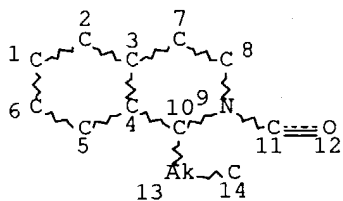
FILE COVERS 1907 - 31 Aug 2004 VOL 141 ISS 10  
 FILE LAST UPDATED: 30 Aug 2004 (20040830/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L3 STR



NODE ATTRIBUTES:

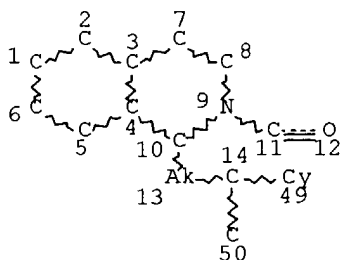
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 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L5 3465 SEA FILE=REGISTRY SSS FUL L3  
 L20 STR



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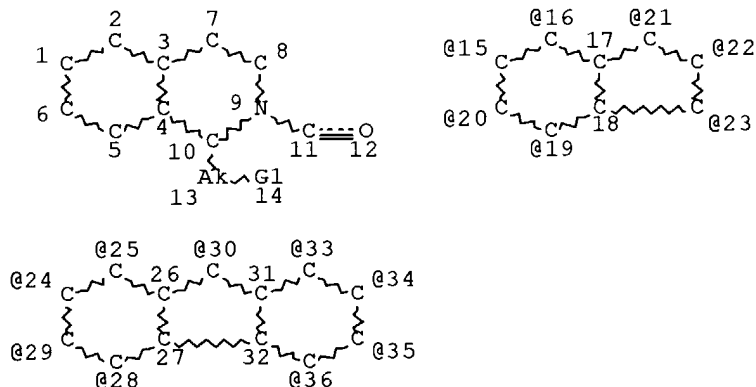
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 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

## STEREO ATTRIBUTES: NONE

L21 5 SEA FILE=REGISTRY SUB=L5 SSS FUL L20  
 L22 STR



VAR G1=15/16/21/22/23/19/20/24/25/30/28/29/33/34/35/36

## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 36

## STEREO ATTRIBUTES: NONE

L23 0 SEA FILE=REGISTRY SUB=L5 SSS FUL L22  
 L24 5 SEA FILE=REGISTRY ABB=ON PLU=ON (L21 OR L23)  
 L25 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L24

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=> d ibib abs hitstr l25 1-4

L25 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:335639 HCAPLUS Full-text

DOCUMENT NUMBER: 125:58291

TITLE: Reaction of 3,4-dihydroisoquinolines with 1,3-dicarbonyl compounds and carboxylic acid chlorides. Novel synthesis of 2-(2-acyltetrahydroisoquinolin-1-yl)-1,3-dicarbonyl compounds

AUTHOR(S): Akhrem, A. A.; Borisov, E. V.; Chernov, Yu. G.

CORPORATE SOURCE: Inst. Bioorg. Khim., Akad. Nauk Respub. Belarus, Minsk, Belarus

SOURCE: Zhurnal Organicheskoi Khimii (1995), 31(11), 1715-1720  
CODEN: ZORKAE; ISSN: 0514-7492

PUBLISHER: Nauka

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Reaction of 3,4-dihydroisoquinolines with carboxylic acid chlorides and 1,3-dicarbonyl compds. (1,3-diketones and  $\beta$ -keto esters) produced a series of 2-(2-acyltetrahydroisoquinolin-1-yl)-1,3-dicarbonyl compds. The stereochem. and tautomerism of the products were discussed.

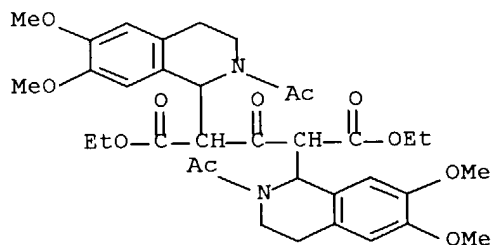
IT **175983-15-0P 175983-16-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 2-(2-acyltetrahydroisoquinolin-1-yl)-1,3-dicarbonyl compds. by reaction of 3,4-dihydroisoquinolines with 1,3-dicarbonyl compds. and carboxylic acid chlorides)

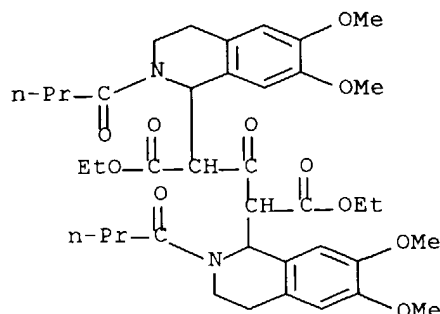
RN 175983-15-0 HCAPLUS

CN Pentanedioic acid, 2,4-bis(2-acetyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl)-3-oxo-, diethyl ester (9CI) (CA INDEX NAME)

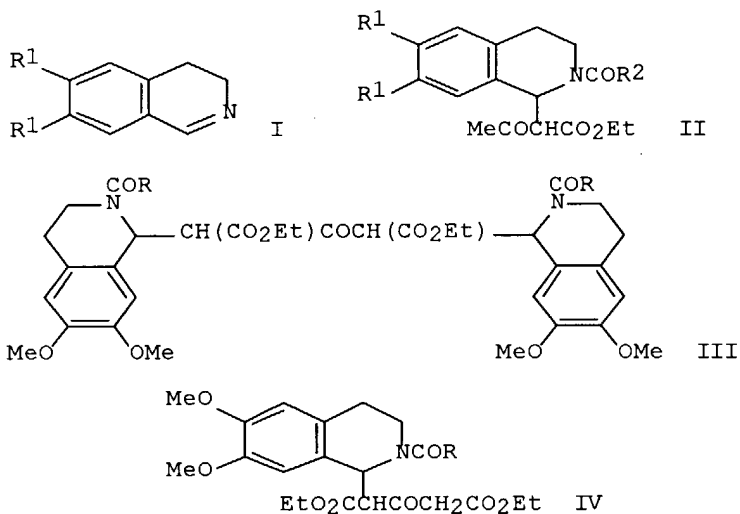


RN 175983-16-1 HCAPLUS

CN Pentanedioic acid, 3-oxo-2,4-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-(1-oxobutyl)-1-isoquinolinyl]-, diethyl ester (9CI) (CA INDEX NAME)



L25 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:162169 HCAPLUS Full-text  
 DOCUMENT NUMBER: 124:316960  
 TITLE: Reaction of 3,4-dihydroisoquinolines with  $\beta$ -keto ester enol acylates  
 AUTHOR(S): Akhrem, A. A.; Borisov, E. V.; Chernov, Yu. G.  
 CORPORATE SOURCE: Inst. Bioorg. Khim., Minsk, Belarus  
 SOURCE: Zhurnal Organicheskoi Khimii (1995), 31(8), 1241-5  
 CODEN: ZORKAE; ISSN: 0514-7492  
 PUBLISHER: Nauka  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI



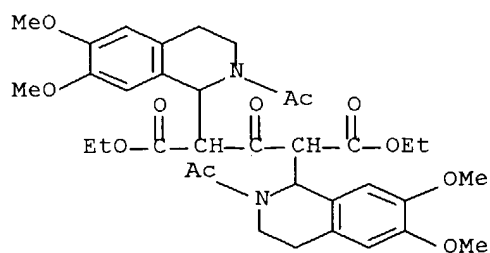
AB Dihydroisoquinolines I ( $R_1 = H, MeO$ ) reacted with  $R_2CO_2CMe:CHCO_2Et$  ( $R_2 = Ph, Me$ ) to give adducts II. I ( $R_1 = MeO$ ) reacted with  $EtO_2CCH_2C(OCOR):CHCO_2Et$  ( $R = Me, Pr$ ) to give adducts III and IV.

IT **175983-15-0P 175983-16-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

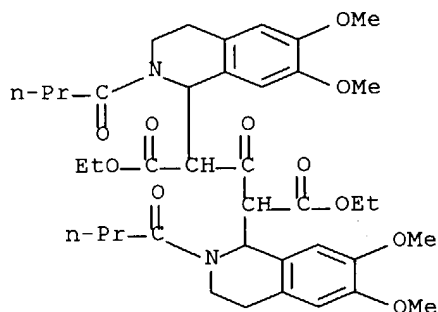
RN 175983-15-0 HCAPLUS

CN Pentanedioic acid, 2,4-bis(2-acetyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl)-3-oxo-, diethyl ester (9CI) (CA INDEX NAME)



RN 175983-16-1 HCAPLUS

CN Pentanedioic acid, 3-oxo-2,4-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-(1-oxobutyl)-1-isoquinolinyl]-, diethyl ester (9CI) (CA INDEX NAME)



L25 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1967:516903 HCAPLUS Full-text

DOCUMENT NUMBER: 67:116903

TITLE: Reaction of vinyl bromide and substituted vinyl bromides with lithium in tetrahydrofuran with formation of lithium acetylides

AUTHOR(S): Schoepf, Clemens; Strauss, Hans J.; Hoehn, Monika; Hutzler, Anneliese

CORPORATE SOURCE: Tech. Hochsch., Darmstadt, Fed. Rep. Ger.

SOURCE: Monatshefte fuer Chemie (1967), 98(4), 1274-309

CODEN: MOCHAP

DOCUMENT TYPE: Journal

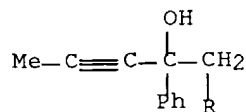
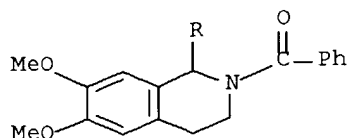
LANGUAGE: German

AB Treatment of 2-bromopropene and 2-bromo-1-butene with Li in boiling tetrahydrofuran (THF) led to Li acetylides, instead of the expected Li alkenes. The major products were the free alkene and LiBr, with a smaller amount of LiH. Similarly, with vinyl bromide the acetylide was formed together with LiH, while Li vinyl was not found. cis-1-Bromo-1-butene also gave the acetylide. In THF the formation of Li acetylide from 2-bromopropene proceeded at  $-65^{\circ}$ , while in Et<sub>2</sub>O reflux temps. were required. Acetylides were also obtained from PhC.tplbond.CH and 1-octyne, while very little reaction was observed with HC.tplbond.CH. The mechanism of acetylide formation is discussed.

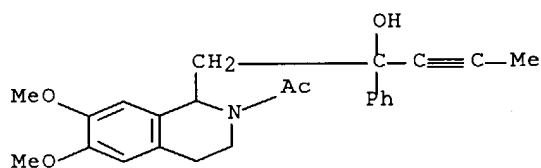
IT **16557-12-3P 16557-17-8P**RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 16557-12-3 HCAPLUS

CN 1-Isoquinolineethanol, 2-benzoyl-1,2,3,4-tetrahydro-6,7-dimethoxy-α-phenyl-α-1-propynyl- (8CI) (CA INDEX NAME)



RN 16557-17-8 HCAPLUS

CN 1-Isoquinolineethanol, 2-acetyl-1,2,3,4-tetrahydro-6,7-dimethoxy- $\alpha$ -phenyl- $\alpha$ -1-propynyl- (8CI) (CA INDEX NAME)

L25 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1964:418195 HCAPLUS Full-text  
 DOCUMENT NUMBER: 61:18195  
 ORIGINAL REFERENCE NO.: 61:3079h,3080a-h  
 TITLE: Quinolizine derivatives  
 INVENTOR(S): Schoepf, Clemens; Klug, Rudolf  
 PATENT ASSIGNEE(S): E. Merck, A.G.  
 SOURCE: 8 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3132147		19640505	US	
BE 632428			BE	
FR 1431659			FR	
GB 977725			GB	

PRIORITY APPLN. INFO.: DE 19610619

OTHER SOURCE(S): CASREACT 61:18195

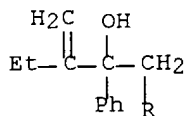
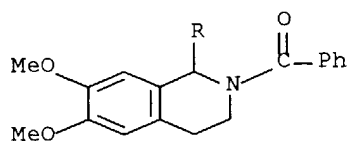
GI For diagram(s), see printed CA Issue.

AB Vinyl bromide (105 g.) in 240 ml. tetrahydrofuran (THF) is treated with 24 g. Mg. in 210 ml. THF to form the Grignard compound, an addnl. 350 ml. THF added, 60 g. 1-phenacyl-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline added with stirring and cooling, the mixture kept at 35° 4.5 hrs. and decomposed with ice-cooling with 250 ml. of saturated NH<sub>4</sub>Cl, the THF layer separated, and the residue extracted with CH<sub>2</sub>Cl<sub>2</sub> to give, from the combined organic solvents, 68% [(6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl)methyl](phenyl)(vinyl)carbinol (I), m. 126-8° (iso-PrOH); HCl salt m. 210-12° (EtOH); HBr salt m. 215-16° (EtOH). A solution of 14.8 g. I.HCl in 61 ml. SOCl<sub>2</sub> is kept at room temperature 16 hrs. and the SOCl<sub>2</sub>

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evaporated to yield 62.6% 1-(6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl)-2-phenyl-4-chloro-2-butene-HCl (II), m. 163-4° (EtOH). II (10 g.) is agitated with 45 ml. CH<sub>2</sub>Cl<sub>2</sub> and 25 ml. 2N NaOH 15 min.; the combined organic solvents give 72% 1,4,6,7-tetrahydro-9,10-dimethoxy-2-phenyl-11bH-benzo[a]quinolizine (III), m. 123-5° (iso-PrOH); HCl salt m. 200-1°; HBr salt m. 214-16°. A solution of 440 mg. III.HCl in 22 ml. MeOH and 1 ml. 2N NaOH is hydrogenated at room temperature under normal pressure in the presence of Raney Ni, the catalyst filtered off, the solvent evaporated, the residue mixed with 5 ml. H<sub>2</sub>O and extracted with 4 portions CH<sub>2</sub>Cl<sub>2</sub>, and the exts. evaporated to give 75% 1,2,3,4,6,7-hexahydro-9,10-dimethoxy-2-phenyl-11bH-benzo[a]quinolizine, m. 89-90° (iso-PrOH); HCl salt m. 229-30°; HBr salt m. 202-4° (decompn). A solution of 60 g. 6,7-dimethoxy-3,4-dihydroisoquinoline in 700 ml. H<sub>2</sub>O and 250 ml. MeOH are added to a citrate-buffered aqueous solution (pH 4.6) and mixed with 60 g. of BzCH<sub>2</sub>CO<sub>2</sub>H in 200 ml. 2 N NaOH, the volume made up to 2 l. with H<sub>2</sub>O and MeOH, the mixture kept 20 hrs. at pH 4.6 and 25°, and 250 ml. 2N NaOH added to give 88% 1-phenacyl - 6,7 - dimethoxy - 1,2,3,4 - tetrahydroisoquinoline, m. 138-9° (Me<sub>2</sub>CO). The following were similarly prepd: bis[(2-benzoyl-6,7-dimethoxy - 1,2,3,4 - tetrahydro - 1 - isoquinolyl)methyl](1-buten-2-yl)carbinol (IV), m. 225-7° (HCONMe<sub>2</sub>-EtOH); bis [(6,7 - dimethoxy - 1,2,3,4 - tetrahydro - 1 - isoquinolyl)methyl] - [1-buten-2-yl]carbinol, m. 126-8° (di-HCl salt m. 250-2°); 1-(6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl) - 2 - [(6,7 - dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl)methyl] - 3- chloromethyl-2-pentene-2HCl, m. 230-3°; α,α'-bis(2- benzoyl-6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl)acetone-2HBr, m. 204-5° (meso form m. 178-80°; dibenzoyl derivative m. 198°); bis[(2-benzoyl-6,7-dimethoxy-1,2,3,4-tetrahydro- 1-isoquinolyl)methyl] (1 - buten - 2-yl)carbinol; bis [(6,7-dimethoxy- 1,2,3,4-tetrahydro- 1-isoquinolyl)methyl] (1-buten-2-yl)carbinol; 2-dehydroemetine(3-ethyl-9,10-dimethoxy-1,6,7,11b-tetrahydro-2-[(6,7- dimethoxy - 1,2,3,4- tetrahydro-1-isoquinolyl)methyl]-4H- benzo[a]quinolizine, m. 112-14° and 194-5° (di-HCl salt m. 248-50°); α,α'-bis(N-benzoyl-6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl)acetone, m. 178-80°; α,α'-bis (6,7-dimethoxy- 1,2,3,4-tetrahydro-1-isoquinolyl)acetone, m. 144-5° (di-HCl salt m. 193-5°; methanesulfonate m. 173-4°); α,α'-bis(2-acetyl-6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolyl)acetone, m. 191-2°; bis[(6,7-dimethoxy-1,2,3,4- tetrahydro-1-isoquinolyl)methyl]-1-buten-2-ylcarbinol-2HCl, m. 193-201°; 9,10-dimethoxy-1,6,7,11b-tetrahydro-2-heptyl-4H-benzo [a] quinolizidine; 1-phenacyl-2-benzoyl - 6,7 - dimethoxy-1,2,3,4- tetrahydroisoquinoline, m. 190-3°; [(2-benzoyl-6,7-dimethoxy - 1,2,3,4 - tetrahydro - 1 - isoquinolyl)methyl]-(phenyl)(1-buten-2- yl)carbinol, m. 164-6° (AcOH ester); (6,7-dimethoxy-1,2,3,4- tetrahydro-1-isoquinolyl)-3-phenyl-2-ethyl - 1-buten-3-ol-HCl, m. 191-3° (iso-PrOH) [free base m. 115-16° (iso-PrOH-H<sub>2</sub>O)]; 1,4,6,7-tetrahydro-9,10-dimethoxy-2-phenyl-3-ethyl-11bH- benzo[a]quinolizine-HCl, m. 209-12° (iso-PrOH) (perchlorate m. 198-9°); 3-ethyl-9,10-diethoxy-1,6,7,11b-tetrahydro-2-[(1,2,3,4- tetrahydro-6,7 - diethoxy - 1 - isoquinolyl)methyl]-4H-benzo [a] quinolizine-2HCl; 3-ethyl-9,10-diethyl-1,6,7,11b-tetrahydro-2-[(1,2,3,4 - tetrahydro - 6,7 - diethyl - 1 - isoquinolyl)-methyl]-4H-benzo[a] quinolizine -2HCl; 1,4,6,7- tetrahydro-2-phenyl-11bH-benzo [a] quinolizine-2HCl; 1,2,3,4,6,7-hexahydro-2-phenyl- 11bH-benzo [a] quinolizine; 1,2,3,4,6,7-hexahydro-9-chloro-2-phenyl- 11bH-benzo[a] quinolizine (V); 3-ethyl-9,10-methylenedioxy - 1,6,7,11b - tetrahydro - 2 - [(1,2,3,4 - tetrahydro-6,7-methylenedioxy - 1 - isoquinolyl)methyl] - 4H - benzo[a] quinolizine; α,α'-bis(2-acetyl-6,7-methylenedioxy- 1,2,3,4-tetrahydro-1-isoquinolyl)acetone-2HBr, m. 243-7° 188-9° (decomposition).

IT 96377-86-5, 1-Isoquinolineethanol, 2-benzoyl-α-(1-ethylvinyl)-1,2,3,4-tetrahydro-6,7-dimethoxy-α-phenyl-  
(preparation of)  
RN 96377-86-5 HCAPLUS  
CN 1-Isoquinolineethanol, 2-benzoyl-α-(1-ethylvinyl)-1,2,3,4-tetrahydro-  
6,7-dimethoxy-α-phenyl- (7CI) (CA INDEX NAME)



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FILE 'CAOLD' ENTERED AT 11:35:54 ON 31 AUG 2004

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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L26 1 L24

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=&gt; d all l26

L26 ANSWER 1 OF 1 CAOLD COPYRIGHT 2004 ACS on STN

AN CA61:3079h CAOLD

TI 8-aminoquinoline

AU Korzunov, N. P.

DT Patent

TI quinolizine derivs.

AU Schoepf, Clemens; Klug, R.

PA Merck, E., A.-G.

DT Patent

PATENT NO. KIND DATE

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PI SU 161757



PI US 3132147 1964  
 BE 632428  
 FR 1431659  
 GB 977725  
 IT 2649-50-5 4914-30-1 21319-81-3 47728-07-4 66833-37-2 94910-05-1  
 96269-28-2 96369-40-3 96369-41-4 **96377-86-5** 96670-94-9  
 96706-87-5 97014-12-5 97924-15-7 97924-16-8 97924-37-3 97925-18-3  
 98588-30-8 100232-63-1 101057-23-2 101060-09-7 104645-01-4 106401-82-5  
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=> select hitrn 126

ENTER ANSWER NUMBER OR RANGE (1-):.  
 'HITRN' IS NOT A VALID FIELD CODE FOR FILE 'CAOLD'  
 ENTER DISPLAY CODE (IT) OR ?:rn  
 E1 THROUGH E25 ASSIGNED

=> select hit rn 126

ENTER ANSWER NUMBER OR RANGE (1-):.  
 E26 THROUGH E26 ASSIGNED

=> fil reg

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STRUCTURE FILE UPDATES: 30 AUG 2004 HIGHEST RN 736108-36-4  
 DICTIONARY FILE UPDATES: 30 AUG 2004 HIGHEST RN 736108-36-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
 information enter HELP PROP at an arrow prompt in the file or refer  
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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L27 1 96377-86-5/RN

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L27 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 96377-86-5 REGISTRY

CN 1-Isoquinolineethanol, 2-benzoyl- $\alpha$ -(1-ethylvinyl)-1,2,3,4-tetrahydro-  
6,7-dimethoxy- $\alpha$ -phenyl- (7CI) (CA INDEX NAME)

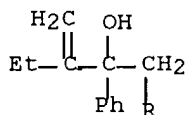
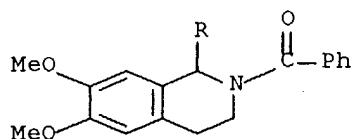
MF C30 H33 N O4

LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS

(\*File contains numerically searchable property data)

DT.CA Caplus document type: Patent

RL.P Roles from patents: NORL (No role in record)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 61:18195